

**IN THE CLAIMS:**

Claims 2-5, 8, 10-20, and 27 were previously cancelled. Claims 26 and 30 are herein cancelled. New claims 31 and 32 are presented herein. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

**Listing of the Claims:**

1. (Withdrawn) A process for modulating virulence of a *Streptococcus* comprising:  
modifying a genomic fragment of the *Streptococcus*;  
wherein at least part of the genomic fragment is capable of hybridizing to the isolated or recombinant nucleic acid molecule of claim 21; and  
generating a clone having the modified genomic fragment.

2.-5. (Canceled).

6. (Withdrawn) The process according to claim 1, wherein modifying the genomic fragment comprises functionally deleting the at least part of the genomic fragment capable of hybridizing to the nucleotide sequence.

7. (Withdrawn) A clone of a *Streptococcus*, obtained by the process according to claim 1.

8. (Canceled).

9. (Withdrawn) A process for assaying virulence of a *Streptococcus* comprising:  
assaying an ability of the *Streptococcus* to infect a subject;  
wherein the *Streptococcus* comprises a genomic fragment associated with a virulence factor to infect a subject; and  
wherein at least part of the genomic fragment is capable of hybridizing to the isolated or recombinant nucleic acid molecule of claim 21.

10.-20. (Canceled).

21. (Previously presented) An isolated or recombinant nucleic acid molecule comprising:

a first nucleotide sequence of *Streptococcus suis* origin

wherein the first nucleotide sequence comprises a contiguous sequence which hybridizes to the full length of nucleotides 89-263 of the nucleotide sequence of SEQ ID NO:37 at 65°C in a buffer having 0.5 M sodium phosphate, 1 mM EDTA, and 7% sodium dodecyl sulphate at a pH of 7.2,

wherein the first nucleic acid molecule remains hybridized to the nucleotide sequence of SEQ ID NO:37 after

washing twice with a buffer containing 40 mM sodium phosphate (pH 7.2), 1 mM EDTA and 5% sodium dodecyl sulphate for 30 minutes at 65°C and;

washing twice with a buffer containing 40 mM sodium phosphate (pH 7.2), 1 mM EDTA and 1% sodium dodecyl sulphate for 30 minutes at 65°C.

22. (Previously Presented) A vector comprising the isolated or recombinant nucleic acid molecule of claim 21.

23. (Previously Presented) A host cell comprising the isolated or recombinant nucleic acid molecule of claim 21.

24. (Previously Presented) The host cell of claim 23, wherein the host cell is of a *Streptococcus* origin.

25. (Previously Presented) A composition comprising the isolated or recombinant nucleic acid molecule of claim 21.

26.-27. (Canceled).

28. (Withdrawn) An isolated or recombinant nucleic acid molecule comprising:  
a nucleotide sequence for a fibronectin-/fibrinogen-binding protein of *Streptococcus suis*,  
wherein the nucleotide sequence comprises the nucleotide sequence of SEQ ID NO:37.

29. (Withdrawn) An isolated or recombinant double stranded nucleic acid molecule comprising:

a gene encoding a fibronectin-/fibrinogen-binding protein; and

a means for hybridizing to the nucleotide sequence of SEQ ID NO:37 at 65°C in a buffer  
having 0.5 M sodium phosphate, 1 mM EDTA, and 7% sodium dodecyl sulphate at a pH of 7.2,  
wherein the means remains hybridized after

washing twice with a buffer containing 40 mM sodium phosphate (pH 7.2), 1 mM  
EDTA and 5% sodium dodecyl sulphate for 30 minutes at 65°C; and

washing twice with a buffer containing 40 mM sodium phosphate (pH 7.2), 1 mM  
EDTA and 1% sodium dodecyl sulphate for 30 minutes at 65°C.

30. (Cancelled).

31. (New) An isolated or recombinant nucleic acid molecule comprising a nucleotide  
sequence of *Streptococcus suis* origin comprising nucleotides 89-293 of SEQ ID NO:37.

32. (New) The isolated or recombinant nucleic acid of claim 31, wherein said  
nucleotide sequence comprises the sequences as listed under GenBank accession no. AF438158.